



Munich Personal RePEc Archive

The stock market and economic development: Should developing countries encourage stock markets?

Ajit Singh

University of Cambridge

5. October 1991

Online at <http://mpra.ub.uni-muenchen.de/53881/>

MPRA Paper No. 53881, posted 25. February 2014 01:21 UTC

October 1991{PRIVATE }

Revised

Please do not quote without the agreement of the author

THE STOCK MARKET AND ECONOMIC DEVELOPMENT:
SHOULD DEVELOPING COUNTRIES ENCOURAGE STOCK
MARKETS?

By Ajit Singh

Faculty of Economics

University of Cambridge

Cambridge CB3 9ET, England

I am grateful to Dr. Yilmaz Akyuz and Professor Albert Fishlow for their helpful comments on an earlier draft of this paper. However, the usual disclaimer applies.

THE STOCK MARKET AND ECONOMIC DEVELOPMENT:
SHOULD DEVELOPING COUNTRIES ENCOURAGE STOCK
MARKETS?

(I)

The Stock Markets and the Developing Countries: The Global Context

In a famous passage in chapter 12 of the General Theory, Keynes observed:

As the organisation of investment markets improves, the risk of the predominance of speculation does, however, increase. In one of the greatest investment markets in the world, namely, New York, the influence of speculation (in the above sense, i.e. 'the activity of forecasting the psychology of the market') is enormous. ... Speculators may do no harm as bubbles on a steady stream of enterprise. But the position is serious when enterprise becomes the bubble on a whirlpool of speculation. When the capital development of a country becomes a by-product of the activities of a casino, the job is likely to be ill-done. The measure of success attained by Wall Street, regarded as an institution of which the proper social purpose is to direct new investment into the most profitable channels in terms of future yield, cannot be claimed as one of the outstanding triumphs of *laissez-faire* capitalism...[Keynes, 1936, pp 158-159]

Today, however, as a part of a general trend towards liberalisation, deregulation, privatisation, the diminution of the role of the state and enhancement of that of the market which for various reasons is sweeping the globe - the North and the South, what remains of the East as well as the West - an important feature of the development of the financial sector

in a large number of developing economies is the very fast growth of stock markets in these countries. The establishment and expansion of these markets is favoured not just by the Bretton Woods institutions, as one would expect, but also by many heterodox economists as well those from the centrally planned economies.

The World Bank, particularly through its affiliate the International Finance Corporation (I F C) is actively involved in fostering stock market development in third world countries and in assisting and encouraging them to open up to foreign portfolio investment. Specifically, the I F C provides technical assistance to a large number of countries on the legal, regulatory and fiscal issues involved as well as on other aspects of the institutional framework for the development of these markets. According to Sudweeks (1989), from 1971 to June 1988, 73 countries requested and received capital market assistance in various forms from the I F C's Capital Markets Department. In 50 of these countries assistance has been provided especially for the development of the security markets. Moreover, I F C's pioneering work in establishing the Emerging Markets Data Base (E M D B), which since 1975 has been analyzing records of a large number of third world companies and providing basic information on many 'emerging' stock markets, has been widely acknowledged to be instrumental in stimulating foreign investors interest in these markets. The I F C in addition has assisted several countries with the launching of the so-called 'country funds' to attract foreign portfolio investment to developing country stock markets¹.

¹ See further Sudweeks (1989) and Atkin and Dailami (1990).

The Bretton Woods Institutions are of course much too sophisticated to admit to any ideological bias in their encouragement of third world stock markets. It is suggested that the stock market expansion is in part a natural progression of the development of a country's financial sector as long term economic growth proceeds. More importantly, it is argued that the existing financial systems, which in many countries have invariably involved government directed and often subsidised credit to priority industries or firms, have proved to be unsuccessful. The Development Finance Institutes (D F I) have been the main vehicles for providing long term finance for industrial development in a number of countries. The D F Is have been facing acute financial difficulties since the economic crisis of the third world began at the end of the 1970s and early 1980s. *The World Development Report* for 1989, which focused on the financial sector, reported that 'in a sample of eighteen industrial D F Is worldwide, on average nearly 50 per cent of their loans (by value) were in arrears, and accumulated arrears were equivalent to 17 per cent of the portfolio value. For three of these institutions, loans accounting for between 70 and 90 per cent of the portfolio values were in arrears. The situation may be worse than the numbers show, because the rescheduling of overdue loans and growing loan portfolios reduce arrears ratios.' (p.60).

The Report goes on to observe: 'The performance of agricultural DFIs has also been poor. Studies show default rates ranging from 30 to 95 per cent for subsidised agricultural credit programmes.' (p. 61). In general, the Report argued strongly against the myriads inefficiencies of these DFIs and the bank- based 'interventionist' financial systems; instead it favoured a restructuring of these systems in the direction of making them more `

voluntary', fiscally neutral and for bringing them as far as practicable under private ownership.

Outside the circle of the Bretton Woods institutions and orthodox economists, a serious case for the expansion and liberalisation of the third world stock markets has recently been put forward by a group of economists and policy makers associated with the World Institute of Development Economics Research (W I D E R). A WIDER Study Group, under the chairmanship of Sir Kenneth Berrill, in its 1990 report on foreign portfolio investment in emerging capital markets, indeed called for the abandonment of section 3, Article VI of the IMF's articles of agreement. This section states that 'member may exercise such control as are necessary to regulate international capital movements', thus permitting countries to impose restrictions on foreign capital flows. The Study Group's basic argument is made in the context of attracting international capital to developing countries when in the foreseeable future the commercial banks may be unwilling to lend to them because of the debt crisis. Hence the need to encourage foreign portfolio investment, and therefore to expand and to liberalise the third world stock markets. However the Study Group go on to suggest:

'The need to attract foreign capital in non-debt creating forms *is only one reason, and not the most important reason, why developing countries should wish to foster their emerging equity markets.* Equity markets are a vital part of economic development — they encourage savings, help channel savings into productive investment and encourage entrepreneurs to improve the efficiency of investments. This report therefore, puts the role of the foreign investor

within the context of the general desirability of the growth of equity markets for domestic resource mobilisation reasons as well as for tapping foreign savings and know-how on market organisation and technology. [WIDER, 1990, p.6, emphasis in original].

There is apparently an even wider group of admirers of the merits of the stock market. The Chinese authorities in recent years have established embryo stock markets in Shanghai, Beijing and a number of other cities. In his Report to the 13th Congress of the Chinese Communist Party in 1988, the then General Secretary of the party Zhao Zhi Yang provided an ideological justification for the use of the stock market by a socialist economy. He suggested that during the 'primary state of socialism', and the 'commodity production' stages of the development of a socialist economy, it is necessary to use various market forms including the stock market. Zhao argued that such institutions should not simply be regarded as a preserve of capitalism: socialism should also take advantage of them whilst minimising their harmful effects². Similarly President Gorbachev, in his address last year to the Supreme Soviet, outlining the economic reform programme for USSR, called for the establishment of stock markets in the country as an integral part of this programme.

The drive towards the setting up of stock markets in developing countries during the last decade is linked also to other important developments in the world economy. Since the mid-1970s, the financial markets of the advanced industrial countries have undergone far-reaching

² For a full discussion of the role of the stock market in a socialist economy, see Singh (1990).

changes and become increasingly integrated. As Cosh, Hughes and Singh (1989) observe these changes have arisen from the operation of a number of interrelated factors: (a) the progressive deregulation of financial markets both internally and externally in the leading countries; (b) the internationalisation of these markets; (c) the introduction of an array of new financial instruments allowing more risky and bigger financial investments; and (d) the emergence and the increasing role of new players on the markets, particularly the institutional investors. The developments in the advanced countries financial sectors has in turn led them to seek liberalisation in the international trade and exchange of services in the current Uruguay Round of trade talks. The establishment of stock markets in developing countries and opening them to foreign security houses as well as to foreign portfolio investors can be viewed as a part of this global liberalisation project.

II. The Stock market and Economic Development: Analytical and Policy Issues

Notwithstanding the present almost universal enthusiasm for the stock markets, it is important to be cautious about the role of these markets in economic development. This is not just because of Keynes's skepticism, as expressed in the passage at the beginning of this essay, about the virtues of the stock market in relation a country's investment needs. Ironically an important debate is taking place today in the US and the UK themselves — countries where the stock market reigns supreme — about the deleterious role of the market in relation to their competitiveness vis a vis West Germany and Japan. In its leader of 24 April 1990, the Financial Times, normally a keen supporter of freely functioning markets

observed:

The big problem for industry in the English speaking economies is a loss of competitiveness in world markets. The key to regaining competitive advantage must lie in the creation of a healthy climate for innovation and investment. Yet the linkage between ownership discipline in open capital markets and innovation is exceptionally imprecise and there are grounds for suspecting the discipline is indeed dangerously short term. A striking feature of many of the more significant technological advances and their financing in post-war Britain is how often success has been achieved under the umbrella of private or restricted voting ownership structure — witness Pilkington's float glass process, Reuters' dealing system or 3i's dominant position in venture capital.'

The *Financial Times* was simply echoing the concern of a number of economists as well as industrialists on both sides of the Atlantic who believe that the equity-market based financial systems, and the 'short termism' it inevitably generates, have put the Anglo-saxon countries at a competitive disadvantage in relation to Japan and West Germany where the equity markets play a far less significant role. It is argued that as a result of the pressures generated in part by the market for corporate control with its hostile takeovers, leveraged buy-outs and mergers, the Anglo-saxon corporate managers consistently invest much less in long term projects than their German and Japanese counterparts where hostile takeovers are an extremely rare phenomenon.

In view of these contradictory assessments of the role of the stock market for competitiveness and long term investment and innovation, it is

essential for the developing countries before they go too far in this direction to ask how precisely do the stock markets help in the industrialisation process. Specifically, the following issues need careful investigation.

- (a) What are the channels through which the establishment of a stock market fosters economic and industrial development in a country?
- (b) How well do such channels operate in practice in countries which have well functioning stock markets?
- (c) How are stock markets likely to function in the particular circumstances of developing countries?
- (d) If stock market are established, can the developing countries avoid their negative effects as Zhao Zhi Yang was suggesting?
- (e) Are there feasible alternatives to stock market-based financial systems? Will the developing countries be better off with such alternatives systems?

These questions will be systematically examined in the following sections. But first section III will report on the growth of the stock markets in developing countries in recent years.

III. The Third World Stock Markets in the 1980s

The main source of information on the third world stock markets and their performance is the Emerging Markets Data Base of the IFC. The IFC monitors 19 developing country stock markets on a fairly comprehensive weekly basis; it also keeps less detailed records of a

further eleven. Table 1, based on IFC data, provides figures on market capitalisation and on the numbers of listed companies for a selection of 'emerging' and developed country stock markets in the 1980s.

The table shows the very rapid extension of the third world stock markets during the last decade. The total value of the shares listed on these markets increased seven fold in US dollar terms between 1980 and 1989 - a much faster rate of growth than in the developed stock markets whose markets capitalisation rose four fold over the same period. The number of companies listed on the emerging stock markets almost doubled during the 1980s; by 1989 over ten thousand companies were listed on these markets. In terms of listed companies, the Indian stock exchanges with nearly six thousand listings were by far the biggest in the world. Most of these

Table 1

Market Capitalisation and Numbers of Domestic Listed Companies: 1980 and 1989
Emerging and Developed Country Stock Markets
(Millions of U.S. Dollars)

	<u>No of Listed</u> <u>Market Capitalisation</u>	<u>Companies</u>		
	1980	1989	1980	1989
<u>Emerging Markets</u>				
Taiwan 6,082	237,012	102	181	
S. Korea	3,829	140,946	352	626
Brazil (Sao Paulo)	9,160	44,368	426	592
Malaysia	12,395	39,842	182	251
India (Bombay)	7,585	27,316	2,265	6,000*
Thailand	1,206	25,648	77	175
Mexico 12,444	22,550	259	203	
IFC Composite Markets**	84,761	596,219	5,079	9,767
All Emerging Markets	86,125	611,130	5,531	10,582
<u>Developed Markets</u>				
Japan 379,679	4,392,597	1,402	2,019	
U.S. 1,448,120	3,505,686	6,251	6,727	
U.K. 205,200	826,598	2,655	2,015	
Italy 25,300	169,417	134	217	
Sweden 37,600	119,285	103	135	
Norway 3,190	25,285	117	122	
Austria 2,000	22,261	66	81	
All Developed Markets	2,651,956	11,095,353	15,694	18,690

* Estimated for all Indian stock markets

** Emerging markets included in IFC index

Source: Compiled from IFC (1990)

companies are of course very small, so that in terms of total capitalisation, the Indian market was less than an eighth of the size of Taiwan's (in 1989) and of course it was tiny compared with the larger developed country markets. Nevertheless, as Table 1 indicates that even with respect to market capitalisation, the Bombay stock exchange (as well as a number of other emerging stock markets) are larger than the stock markets of smaller European countries such as Sweden, Norway or Austria. The biggest third world stock markets, namely Taiwan, is in fact now considerably larger than the Italian stock market.

Table 2 below provides information on market capitalisation relative to GNP for the emerging markets. At the end of 1988, the value of stocks listed on the IFC sample of thirty developing country stock markets constituted together about four per cent of the

Table 2

Market Capitalisation* Relative to GNP**
Emerging and Developed Country Stock Markets 1988-89

Taiwan	118.3
S.Korea	71.4
Brazil (Sao Paulo)	8.4
Malaysia	69.1
India Bombay	8.7
Thailand	16.9
Mexico	16.8
All 30 Emerging Markets in IFC Sample	21
All Developed Country Markets	65

*End of Sept.1989. ** End of 1988

Source: WIDER (1990) and IFC Emerging Markets Data Base

total capitalisation of the world stock markets. The corresponding combined GNP of the same countries amounted to eleven per cent of the world GNP, which indicates much lower capitalisation in relation to GNP

for developing countries compared with the developed economies. However as Table 2 shows that even on this criterion, the Taiwanese the South Korean and the Malaysian markets were by the end of 1980s larger than the average stock market in the developed countries. In relation to GNP, market capitalisation in other emerging markets is much smaller than that for the average developed country market.

The seven emerging markets listed in Tables 1 and 2 are the largest third world stock markets and together constitute nearly 90 per cent of the total market capitalisation of the thirty developing country markets in the IFC sample. South Korea and Taiwan alone account for more than 60 per cent of the emerging markets' combined capitalisation. Table 3 indicates that in general the emerging markets also individually exhibit greater concentration than developed country stock markets. At the end of 1989, the share of total market capitalisation accounted for by the ten largest stocks was greater than 60 per cent in Argentina, Colombia, Venezuela, Jordan and Turkey. Although comparable data for developed country markets is not available, the generally high figures for the share of value traded held by ten most active stocks in the second columns of Table 3 suggests that most third world markets are fairly 'thin'.

Table 3

Market Concentration: Share of Market Capitalisation Held by Ten Largest Stocks* and Share of Value Traded Held by Ten Most Active Stocks* End 1989

Share of market capitalisation held by ten Market largest stocks, end 1989	Share of value traded held by ten most active stocks, 1989	
Latin America		
Argentina	67.7	83.5
Brazil 22.5	31.0	
Chile 47.2	67.1	
Colombia	71.7	61.5
Mexico 36.3	44.6	
Venezuela	65.4	71.5
East Asia		
Korea 19.2	22.7	
Philippines	32.1	32.7
Taiwan, China	38.0	16.6
South Asia		
India 20.8	47.3	
Malaysia	37.7	16.2
Pakistan	19.3	18.2
Thailand	35.4	35.8
Europe/Mideast/Africa		
Greece 53.1	65.9	
Jordan 61.3	50.9	
Nigeria 51.6	31.5	
Portugal	43.4	37.3
Turkey 60.1	74.8	
Zimbabwe	45.9	64.3
Developed markets		
Canada 24.2	-	
France 24.5	-	
Germany	41.9	-
Japan 19.5	-	
Switzerland	48.9	-
U.K. 21.9	-	
U.S.A. 13.7	-	

*Stocks in the IFC Composite Index Relative to the Total Stock Market.
Source: IFC (1990), p.19.

Tables 4 and 5 provide information on the performance of shares on the 19 emerging stock markets in the IFC composite index. Table 4 shows that in 1989, the average price-earnings ratio of Taiwanese stocks was a little over 50, almost the same as the average ratio on the Japanese market. Except for Brazil, all the leading third world stock markets recorded in that year price-earnings ratios considerably higher than those on the U.S. or the U.K. stock markets. The average dividend yields in 1988 and 1989 in Taiwan and South Korea were generally much lower than those in the other emerging markets. The performance of the Taiwanese market appears to be very similar to that of Japan in this respect as well. However a high price-earnings ratio does not necessarily imply a low dividend yield as the case of Brazil shows: in 1989 the stock market in that country recorded a relatively low price-earnings ratio (of 8.1) and also one of the lowest dividend yields among the emerging markets.

From the point of view of an overseas investor in the developed countries what is important is the total return on the shares - dividends as well as capital gains - expressed in terms of hard currency. Fortunately the IFC calculates such indices for emerging markets (see Table 5). The table shows that if we consider the period 1984 to 1989 as a whole, the 'total return' on the IFC composite index of all emerging markets was not quite as good as that

Table 4**The Price-Earnings, Price-Book Value Ratios and Dividend Yields; Emerging and Developing Country Stock Markets 1988 and 1989**

{PRIVATE } Market	Price/earnings ratio			Price/book value ratio			Dividend yield		
	This year	Relative to world	One year ago	This year	Relative to world	One year ago	This year	Relative to world	One year ago
<u>Latin America</u>									
Argentina	22.14	1.15	11.30	1.64	0.63	0.30	4.69	2.13	3.62
Brazil	8.30	0.45	7.95	1.34	0.52	0.72	0.66	0.30	1.50
Chile	5.82	0.30	4.40	1.33	0.51	1.11	9.5	4.32	9.38
Colombia	6.96	0.36	8.75	1.08	0.42	1.59	7.05	3.20	5.93
Mexico	10.66	0.55	5.04	1.03	0.40	0.69	2.10	0.95	3.02
Venezuela	6.44	0.33	11.45	1.37	0.53	2.31	2.21	1.00	1.10
<u>East Asia</u>									
Korea	38.57	2.00	39.51	2.50	0.96	3.34	1.26	0.57	0.54
Phillipines	18.50	0.96	9.92	4.35	1.67	2.75	1.10	0.50	2.23
Taiwan, China	51.71	2.65	40.23	6.55	2.52	4.57	0.58	0.26	0.61
<u>South Asia</u>									
India	18.34	0.95	21.51	3.46	1.33	2.46	1.93	0.88	3.23
Malaysia	30.75	1.59	24.14	3.34	1.28	2.58	2.19	1.00	2.04
Pakistan	8.44	0.44	9.37	1.80	0.69	1.68	8.26	3.75	7.93
Thailand	23.07	1.20	12.62	8.06	3.10	3.41	7.94	3.61	4.01

Table 4 (continued)**The Price-Earnings, Price-Book Value Ratios and Dividend Yields; Emerging and Developing Country Stock Markets 1988 and 1989**

{PRIVATE } Market	Price/earnings ratio			Price/book value ratio			Dividend yield		
	This year	Relative to world	One year ago	This year	Relative to world	One year ago	This year	Relative to world	One year ago
<u>Europe/Mideast/Africa</u>									
Greece	24.30	1.26	10.59	3.12	1.20	2.33	4.62	2.10	5.62
Jordan	14.93	0.77	17.30	1.88	0.72	1.48	2.38	1.08	3.40
Nigeria	6.99	0.36	6.07	1.83	0.70	3.46	7.33	3.33	8.96
Portugal	21.42	1.11	26.50	3.79	1.46	4.36	1.87	0.85	1.34
Turkey	17.64	0.91	2.62	7.18	2.76	1.53	3.61	1.64	11.24
Zimbabwe	7.00	0.36	4.24	1.27	0.49	4.00	9.75	4.43	7.79
<u>Developed Markets</u>									
France	12.50	0.65	12.60	2.09	0.80	1.82	2.70	1.23	2.80
Germany	17.80	0.92	15.60	2.39	0.92	1.89	2.90	1.32	3.60
Japan	51.90	2.69	53.80	4.79	1.84	4.79	0.40	0.18	0.50
United Kingdom	11.70	0.61	10.40	1.95	0.75	1.08	4.50	2.05	5.00
United States	14.10	0.73	11.60	2.16	0.83	1.81	3.30	1.50	3.70
World	19.30	1.00	18.10	2.60	1.00	2.41	2.20	1.00	2.40

Table 5**The 'Total Return' (a) Indices: Emerging and Developed Country Stock Markets
1984-89**

{PRIVATE }Market	1984	1985	1986	1987	1988	1989
Index						
IFC Composite	100.0	128.3	144.1	166.2	267.3	415.4
IFC Latin America	100.0	179.2	168.8	103.3	200.4	331.5
IFC Asia	100.0	98.1	134.9	193.6	354.9	558.4
S&P 500	100.0	131.7	156.2	164.4	191.5	251.9
EAFE	100.0	156.7	266.3	332.7	427.9	474.1
IFC Composite	-	28.3	12.3	15.3	60.9	55.4
IFC Latin America	-	79.2	-5.8	-38.8	94.1	65.4
IFC Asia	-	-1.9	37.5	43.5	83.3	57.3
S&P 500	-	31.7	18.6	5.2	16.5	31.6
EAFE	-	56.7	69.9	24.9	28.6	10.8

(a) Dividend plus capital gain

Source: IFC (1990), p. 19.

on the stocks in the Europe, Australia and Far East Index (EAFE). It is also significant that if we consider the period before the 1987 crash, the total return on the emerging market stocks was generally lower or almost the same as that on the Standard and Poor 500. Since the crash, the performance of the emerging markets has been far better than that of firms in the Standard and Poor 500, with the average total return index increasing by 60 per cent in 1988 and a further 55 per cent in 1989 on the third world stock markets compared with a much smaller corresponding growth in the total return on the shares in the Standard and Poor 500.

Other salient features of the third world stock markets (for example their volatility, the correlation of their price movements with those in the advanced country markets, new issues etc) will be discussed in subsequent sections. However to round off this preliminary examination of the 'emerging' markets³, tables 6 and 7 provide detailed information on the behaviour of two stock markets - those of South Korea and India - in the 1980s. These tables bring out more clearly the enormous expansion of each of these markets during the last decade. Although market capitalisation and trading volume rose four and five folds respectively in

US dollars terms in India during the 1980s, on the Korean market, the corresponding growth of total capitalisation was more than thirty fold and that of trading volume almost sixty fold. The figures in table 7 also bring out the magnitude of the stock market boom in Korea over the period 1985 to 1988. In local currency terms the Korean share prices increased five fold over this period whilst the 'total return' index in US dollars rose

³ The IFC uses the term 'emerging' markets for all developing country stock markets. However, as a historical footnote it is important to remember that some of these markets have been around for a very long time indeed. Informal trading in shares in Bombay goes back to 1830s. However what is clear is that the main impetus for the growth of most of these markets has come in the 1970s and particularly in the 1980s.

by a multiple of 6.

Table 6
The Stock market in Korea: Chief Characteristics: 1980-89

{PRIVATE }	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
A. Number of Listed Companies										
Korea Stock Exchange	352	343	334	328	336	342	355	389	502	626
B. Market Capitalization										
1) In billions of won	2,527	2,959	3,301	3,490	5,149	6,570	11,994	26,163	64,544	95,477
2) In millions of US dollars	3,829	4,224	4,408	4,387	6,223	7,381	13,924	32,905	94,238	140,946
C. Trading Value										
1) In billions of won	1,134	2,534	1,974	1,753	3,118	3,621	9,598	20,497	58,081	81,200
2) In millions of US dollars	1,867	3,721	2,700	2,260	3,869	4,162	10,889	24,919	79,180	121,264
3) Turnover ratio	44.2	92.4	63.1	51.6	72.2	61.8	103.4	107.4	128.1	101.5
D. Local Index										
1) KSE Composite Index (Jan. 1980=100)	106.9	131.4	127.3	121.2	142.5	163.4	272.6	525.1	907.2	909.7
2) Change in index (%)	-10.2	22.9	-3.1	-4.8	17.5	14.7	66.9	92.6	72.8	0.3
E. IFC Emerging Market Data Base										
1) Number of stocks	25	25	25	25	25	25	23	23	62	61
2) Share of market cap. (%)	22.1	28.4	27.3	27.6	24.8	32.5	39.3	24.4	58.8	45.7
3) P/E ratio	-	-	-	-	-	-	25.7	21.7	39.5	38.6
4) P/BV ratio	-	-	-	-	-	-	2.5	2.5	3.3	2.5
5) Dividend yield (%)	8.6	6.3	6.1	5.2	4.7	4.1	2.7	2.1	0.5	1.3
6) Total return index (Dec. 1984=100)	57.8	81.9	84.5	82.1	100.0	138.5	260.8	365.4	788.6	797.2
7) Change in total return index (%)	-36.2	41.8	3.1	-2.9	21.8	38.5	88.3	40.1	115.8	1.1
F. Economic Data										
1) Gross domestic product (in US \$ millions)	62,418	69,048	72,376	78,638	85,445	86,792	98,307	131,337	170,828	-
2) Consumer price index (1980=100)	100	121	130	135	138	141	145	149	160	-
3) Exchange rates (end of period)	659.8999	700.5000	748.7998	795.5000	827.3999	890.1999	861.4000	795.1000	684.9000	677.4000
4) Exchange rates (average of period)	607.4232	681.0283	731.0839	775.7482	805.9758	870.0197	881.4500	822.5700	733.5390	669.6100

- Not available

Source: IFC (1990), p. 96.

Table 7
The Stock Market in India: Chief Characteristics 1980-89

{PRIVATE }	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
A. Number of Listed Companies										
1) Bombay Stock Exchange	992	1,031	1,106	1,151	1,295	1,529	1,912	2,095	2,240	2,390
2) Calcutta Stock Exchange	891	1,068	1,305	1,218	1,862	1,980	2,113	2,073	2,233	2,407
3) All India	2,265	2,114	3,358	3,118	3,882	4,344	4,744	5,560	5,841	6,000
<u>B. Market Capitalization</u>										
1) In rupees	60,147	107,389	110,761	89,300	99,840	174,750	178,300	186,650	358,150	460,000
2) In US dollars	7,585	11,802	11,497	8,510	8,018	14,364	13,588	14,480	23,845	27,316
<u>C. Trading Value</u>										
1) In rupees	21,700	63,950	47,560	24,010	44,500	61,340	135,960	87,400	170,035	280,320
2) In US dollars	2,760	7,386	5,030	2,377	3,916	4,959	10,781	6,743	12,241	17,362
3) Turnover ratio	40.3	76.3	43.6	24.0	47.1	44.7	77.0	47.9	62.4	68.5
<u>D. Local Index</u>										
1) F.E. Bombay Index (1979=100)	123.6	175.2	166.9	182.8	199.8	396.4	424.8	389.9	634.5	839.9
2) Change in Index (%)	23.6	41.8	-4.8	9.6	9.3	98.4	7.2	-8.2	62.7	32.4
<u>E. IFC Emerging Markets Data Base</u>										
1) Number of stocks	25	25	25	25	25	25	47	40	40	60
2) Share of market cap. (%)	19.5	16.4	16.1	22.4	23.6	27.6	45.9	40.2	33.2	46.0
3) P/E ratio	-	-	-	-	-	-	18.0	22.0	21.5	18.3
4) P/BV ratio	-	-	-	-	-	-	3.5	1.9	2.5	3.5
5) Dividend yield (%)	3.8	3.2	3.7	3.2	3.4	2.0	2.6	2.7	3.2	1.9
6) Total return index (Dec. 84=100)	80.2	103.8	101.4	102.9	100.0	205.1	199.3	168.8	232.2	242.8
7) Change in total return index (%)	37.2	29.5	-2.4	1.5	-2.8	105.1	-2.8	-15.3	37.6	4.5
<u>F. Economic Data</u>										
1) Gross domestic product (in US \$)	172,725	184,120	187,822	205,242	202,015	211,609	232,168	254,948	-	-
2) Consumer price index (1980=100)	100	113	122	136	148	156	170	184	202	-
3) Exchange rates (end of period)	7.9302	9.0992	9.6339	10.4932	12.4514	12.1655	13.1220	12.8900	15.0200	16.8400
4) Exchange rates (average of period)	7.8629	8.6585	9.4551	10.0989	11.3626	12.3687	12.6110	12.9620	13.8903	16.1457

All data for the Bombay Stock Exchange only, except as noted. See. p. 149 for information on other principal exchanges.
Source: IFC (1990), p. 88.

Estimated

- Not available

IV. Theories of Finance and Economic Development: Alternative Perspectives

Before we consider the transmission mechanism - the precise channels through which the stock market may help or hinder economic development - it will be useful to examine the broader issues of the role of finance in economic growth from alternative theoretical perspectives.

IV.1 - The Neoclassical and Keynesian Perspectives: The Well Developed Capital Markets

Since the late 1950s and until recently the modern neoclassical view of finance has been dominated by the so-called 'irrelevance theorems' associated with Modigliani and Miller [1958, 1961]⁴. In seminal contributions starting with their pioneering 1958 paper, Modigliani and Miller put forward two central propositions above the theory of finance. They showed that in fully developed capital markets, under neoclassical assumptions of perfect competition, no transactions costs and no taxation, even in a world of uncertainty, the stock market valuation of the firm is independent of its financing or dividend pay-out decisions. On the basis of certain further restrictive assumptions about expectations and the nature of uncertainty (e.g. uniformity in expectations held by all investors on the stock market), it was established that the market would value the firm's shares entirely on the basis of its earnings prospects; share prices would be invariant to the capital structure of the firm or the extent it resorts to internal or external sources to finance its investment plans. In a broader sense, the Modigliani and Miller theorems thus suggested a dichotomy between finance and the real economy: the corporate growth and investment decisions are dictated completely by 'real' variables such as productivity, demand for output, technical progress and relative factor prices of capital and labour. Finance in this paradigm is always permissive and simply facilitates the investment process.

⁴ The following analysis in this sub-section is based on Singh and Hamid [1991].

The normal Keynesian perspective on the role of finance in investment and economic growth also assumes well developed but not perfect capital markets, particularly in relation to the costs, the reliability and the availability of relevant information on equal terms to all the participants in the market. (The significance of this point will become clear in the discussion in the following pages.) In the Keynesian view, investment is essentially determined by 'animal spirits', by businessmen's confidence and by expected demand. Although in principle the rate of interest matters, in practice it is regarded as being relatively insignificant compared with the demand factors.

As they do not accept the assumption of perfect capital markets, Keynesian economists do not generally believe that the Modigliani and Miller propositions are operational in the real world. These neoclassical irrelevance theorems also run contrary to the traditional conception of a firm's investment and financing decisions. The traditional view was a so-called pecking order theory of finance,⁵ which suggested that firms always preferred internal to external finance and if they had to use external finance, they would prefer to employ debt and only as a last resort equity finance. The firm's capital structure and its dividend pay-out decisions, in this analysis, were important variables which had an independent influence on its share price. More generally, the availability of the appropriate kind of finance could constrain a firm's growth or investment plans: this suggestion was often incorporated in the post-war microeconomic investment models in the Keynesian spirit⁶.

Paradoxically, the above traditional theory of finance has been

⁵ See for example Donaldson [1961]. See also Myers [1984, 1985] and Fazzari, Hubbard and Peterson [1988].

⁶ See for example Mayer and Kuh [1957]; Mayer and Glauber [1964].

resurrected and revalidated by a number of new theoretical developments of the last decade and by attempts to relax some of the highly restrictive assumptions of the Modigliani and Miller propositions. With respect to the latter, it was noted at the simplest level that if taxation and possibility of bankruptcy and financial distress are introduced into the analysis this would produce an optimal capital structure for the firm and thus invalidate the Modigliani -Miller irrelevance theorems. Many corporate tax systems, for example, allow interest to be deducted as costs, which provides a significant tax advantage to the use of debt finance. There is, however, a trade-off, since too high a level of debt increases the risks of bankruptcy or financial distress in an economic downturn. This simple trade-off model leads to an optimal debt-equity ratio for the firm which maximizes its stock market valuation ⁷.

More complex considerations and the new theoretical developments involving asymmetric information between insiders (managers) and outsiders (creditors or shareholders), problems of adverse selection, moral hazard, agency costs, signalling, transactions costs, lead to different costs of the various forms of finance ⁸ and can be shown to be broadly compatible with the 'pecking order' type theory outlined above ⁹.

In general, this far richer and more complete analysis of the issues points to the significance of the corporate capital structures and the financial decisions for the real economy. As a minimum, the new models of the

⁷ The taxation argument is of course far more complicated than is suggested in the simple model outlined here, which abstracts inter alia from important issues of personal taxation. There is a very large literature on this subject. See, among others, King [1977]; Auerbach [1979]; Auerbach and King [1983]; Miller [1977]; Di Angelo and Masulis [1980]; Poterba and Summers [1985].

⁸ There is again a very large literature which has developed in this area during the last decade or so. See among others: Jensen and Meckling [1976]; Myers [1977]; Ross [1977]; Grossman and Stiglitz [1980]; Grossman and Hart [1982]; Myers and Majluf [1984]; Greenwald, Stiglitz and Weiss [1984]; Stiglitz [1985]; Williamson [1988]. For a non-technical review of this literature, see Edwards [1988]. See also footnote 11 below where simple explanations for a number of key concepts in the theory of imperfect information is provided.

⁹ See for example Fazzari et al [1988]; Myers and Majluf [1984]; Myers [1977] [1984] [1985].

firm suggest that 'finance' is not simply a veil, but that there are very important interactions between corporate finance and the real economy. Thus contrary to the neoclassical investment models (see in particular the widely known contributions by Jorgensen and his colleagues) which have dominated the profession in the 1960s and 1970s, many economists in the 1980s, particularly the post-Keynesian ones, regard 'cashflow' and corporate retained earning as being a significant constraint on a firm's investment decisions.

IV.2 Under Developed Capital Markets and Economic Development: Financial Repression, Financial Liberalisation and the Stock Market

The theories of finance outlined above have assumed the existence of well developed capital markets and, therefore, been mainly concerned with the advanced economies. In relation to developing countries, where the capital markets are generally under-developed, there is another branch of neoclassical literature that is relevant. This body of thought is associated with McKinnon and Shaw who in separate but broadly similar contributions since the mid-1960s have explicitly sought to relate capital market developments to long term economic growth in the developing countries. This so-called Stanford School has inter-alia advanced the following main propositions¹⁰. Firstly, 'financial deepening' through growing financial intermediation and monetarisation of the economy aids economic development. Secondly, 'financial repression', whereby in many third world countries the governments keep the interest rates artificially low and provide subsidised credits either to favoured sectors or to themselves, is inimical to long term economic growth. Thirdly, 'liberalisation' of these repressed credit markets will foster development since by raising interest rates to their 'equilibrium' levels leads not only to

¹⁰ See McKinnon [1973], Shaw [1973]. For a review of this literature, see Fry [1988].

higher savings but also to more efficient use of investment resources.

All these assertions, particularly the last two, are highly controversial both at a theoretical level as well as empirically. It is not our purpose here to provide a detailed analysis of these propositions but within the confines of this paper, very briefly, among other aspects, the Keynesian economists contest the McKinnon and Shaw hypotheses on the ground that the underlying model assumes that savings determine investment and that a full utilisation of resources is always guaranteed. Moreover they point out that whether or not higher interest rates in the formal sector, following liberalisation, will increase aggregate savings will depend on the saving behaviour of the losers and gainers from this process. To the extent that the personal sector finances the investments of the corporate sector, which in developing countries is often highly geared, higher interest rates may reduce corporate profits and retain earnings. The central point is that although the rise in interest rates will increase personal incomes, if the savings propensity of the personal sector is lower than that of the corporate sector (which is likely), it would lead to a fall in total savings (Akyuz, 1991).

More importantly, whether for the above reasons or others, empirical evidence from many countries which have liberalised their credit markets and increased real interest rates does not indicate a systematic rise in aggregate savings. As Cho and Khatkhate (1989) conclude from their recent analysis of the financial liberalisation experience of five Asian countries (South Korea, Malaysia, Sri Lanka, Philippines and Indonesia):

Finally, financial reform, whether comprehensive and sweeping or measured and gradual, does not seem to have made any significant difference to the saving and investment activities in the liberalised economies. It was believed until recently

that removal of the repressive policies would boost saving. The survey in this paper of the consequences of reforms does not reveal any systematic trend or pattern in regard to saving (and also investment), though it clearly demonstrates that reform has greatly contributed to the financialisation of savings. In most of these countries, saving changed in a random fashion.

Akyuz [1991] reaches the same conclusion with respect to aggregate savings in relation to Turkey's liberalisation experiment during the late 1970s and in the 1980s.

As for the effects of credit market liberalisation on the efficiency of the investment allocation process, leaving aside the disastrous consequences of such liberalisation in the Southern Cone countries in the 1970s, many successful economies have used subsidies, even negative interest rates, for long period of time as an important part of their industrial policies during the course of economic development. This has certainly been true of Japan which has provided negative real interest rates to its favoured corporations for much of the post-war period of its most rapid industrialisation [1950 - 1973]. Thus Sachs [1970] notes in relation to Japan:

Domestic capital markets were highly regulated and completely shut off from world capital markets. The government was the only sector with access to international borrowing and lending. Foreign direct investment was heavily circumscribed with majority ownership by foreign firms both legally and administratively barred. During the early to mid-1950s, about a third of external funds for industrial investment originated in loans from government financial institutions, at preferential rates that varied across firms and industries. These state financial institutions remained an important source of cheap financing until the 1960s.

As Amsden [1990] points out subsidies and directed credit have also been a central feature of South Korea's highly successful industrial policy during the last two decades.

Significantly, the McKinnon - Shaw analyses concentrated on

imperfections and repression of the third world credit markets and did not examine the role of the stock market. Recent theoretical work in the 'imperfect information' paradigm regards this as one of their serious shortcoming. In a number of contributions, Stiglitz and others ¹¹ have shown that even if the credit markets were perfect, because of asymmetric information between the suppliers (the banks) and users of finance (corporations), the market determined interest rates will not allocate credit efficiently. As Hoffman and Stiglitz [1991] note because of imperfect information, the interest rate takes on the dual function of price as well as an instrument for regulating the risk composition of the lender's portfolio. This leads to the result that despite the existence of perfect competition in credit markets, if there is an excess demand for loans at a given interest rate, the banks may ration credit rather than raise interest rates.

It can further be shown that in these circumstances because of the operation of the 'adverse selection effect' and the 'incentive effect', given several groups of observationally distinguishable borrowers, imperfect

¹¹ See for example Stiglitz and Weiss [1981, 1983] and Stiglitz (forthcoming). The terms "agency costs", "asymmetric information", "moral hazard", "adverse selection effect", etc. ,are basic concepts used in recent advances in the theory of imperfect information. The underlying ideas are fairly straight forward." Asymmetric information" may for example arise from the fact that in management controlled large corporations quoted on the stockmarkets, the managers and the shareholders do not have access to the same or symmetric information . Managers clearly know a great deal more about the operations and the future prospects of their corporations than do the shareholders; moreover, particularly if the corporation is not doing well, the managers have an incentive to conceal this information from the shareholders. In principal ,the managers are supposed to be the agents of the firm's shareholders. However, since the objectives of the two groups may differ, in corporations where there is a separation of ownership from control , there is a "moral hazard" that the managers may pursue policies which promote their own ends at the expense of those of the shareholders. This also leads to the so-called "principal-agent" problem : how can the shareholders (the principals) ensure that the managers (the agents) act in the principals' interests rather than their own. This results in "agency costs" which derive from the costs involved in designing special incentive or monitoring arrangements for this purpose.

The above concepts are applicable in many other areas of economics. The problems of "asymmetric information" are particularly rife in the credit markets : normally the creditors do not have the same information as the borrowers as to how the loans may be utilised. In view of these asymmetries and other imperfections in the information mechanism," adverse selection" may occur in otherwise perfect credit markets if, as interest rate rises,the riskier rather than the more efficient borrowers may be more willing to contract loans at such interest rates.In order to avoid such "adverse selection", creditors even in perfect markets, faced with an increase in the demand for credit , may prefer to ration loans at the current interest rates rather than to raise the rates.

information results in some groups being totally excluded from the credit market, although the expected returns of the excluded groups' investments may be higher than those of the groups that get credit. (Stiglitz and Weiss, 1981; Ordoover and Weiss, 1981). To reduce or to eliminate such inefficiencies, Cho [1986] argued that the credit markets need to be supplemented by a well functioning equity market. He suggests that this is because *'equity finance is free from adverse selection and moral hazard effects while debt finance is subject to them in the presence of asymmetric information.'* ... In order for the lenders (debt finance) to allocate credit to firms as efficiently as equity investors, they must know one more parameter, the riskiness of each individual borrower. Therefore, in a world of imperfect information, the existence of equity markets will enhance the allocative efficiency of capital'. (page 197, italics in original).

There is however a crucial informational assumption underlying Cho's analysis, namely, that *'risk - neutral lenders and potential shareholders have the same level of information on firms as describe above, i.e., they can sort out among groups of borrowers whose expected productivities are the same but cannot sort them within groups according to their degree of riskiness.'* But how much information (relative to a bank) does an individual investor on equity markets have concerning management-controlled firms and their myriads investment projects? Equally importantly, if information is costly, what incentive does a small shareholder have for acquiring such information? Cho's argument is exceptionally problematical in terms of the informational requirements it imposes on the individual equity investor; moreover it totally ignores the *'agency problem'* in management controlled corporations. In a world of asymmetric information as well as the agency problem, the existence of a stock market may lead instead to even greater capital market inefficiencies as will become evident from the discussion in section V below.

Finally, a general theoretical argument for third world countries to integrate their stock markets with those of other (advanced) countries and for global stock market integration has been advanced by Subrahmanyam [1975]. He examined the benefits of integration to 'individual investors' under three alternative forms of utility functions (quadratic, exponential and logarithmic). For two economies whose capital markets were being merged, for each of the three utility functions, Subrahmanyam, rigorously established that 'international capital market integration is Pareto-optimal-the welfare of each individual in the two economies will generally improve and never decline. When the correlation between the two market portfolios is perfectly positive, investors are no better off. In all cases, the effect of the extension of the opportunity set nullifies the effect of a negative change in the wealth' (page 24).

However as Subrahmanyam himself recognises his model is a rather abstract one. It ignores all the relevant features of the real world stock markets which bear on the question of globalisation and integration: international takeovers and mergers, speculation, capital flight, the vulnerability of a national economy to international capital market instability as well as other international macroeconomic factors.¹² The adverse consequences for the national economy resulting from the operation of any one of these factors will play havoc with the pareto-optimality result.

V. The Stock Market and Economic and Industrial Development: The Channels of Transmission: Theories and Evidence¹³

From a general discussion of the theories of the financial sector and

¹² See Cosh, Hughes and Singh [1989] for a discussion of these factors. See also section VII.3 below.

¹³ The discussion in this section draws on my paper Singh, 1990.

the role of financing economic development, we return now to an analysis of the specific channels through which the stock market may affect industrial and economic growth. In principle a well functioning stock market may help the development process in an economy through the following means:

1. Growth of savings
2. Efficient allocation of investment resources
3. Better utilisation of the existing resources

These three central tasks are performed on the stock market by essentially two kinds of market mechanisms: the pricing process and the take-over mechanism. The main issue relevant to this paper is how well do these mechanisms work in practice and how successfully are the above functions in fact performed in the real world. We shall consider here evidence from the well organised stock markets of advanced economies

Needless to say there is a voluminous literature on this subject, but our discussion here will inevitably be brief and concentrate only on the essential points.¹⁴ The stock market is supposed to encourage savings by providing households with an additional instrument which may better meet their risk preferences and liquidity needs. In well-developed capital markets share ownership provides individuals with a relatively liquid means of sharing risk in investment projects. In practice however, evidence from advanced countries indicates that the stock market performs this savings function not at all well. As Mayer's [1990] analysis of flows of funds data for several industrial countries on a comparable basis over the period 1970 to 1985 shows (see Table 8), the equity market's net contribution to investment needs of the non-financial corporate sectors both in the US and the UK was negative over this period. What this indicates

¹⁴ For a recent review article on the subject, see Hughes and Singh [1990].

Table 8**Weighted Average Net Financing of Non-Financial Enterprises in Advanced Countries, 1970-85**

{PRIVATE }	Canada	Finland	France	Germany	Italy	Japan	United Kingdom	United States
Retentions	78.1	64.2	N.A.	72.6	N.A.	N.A.	107.2	89.2
Capital transfers	.0	.2	N.A.	9.4	N.A.	N.A.	2.7	.0
Short term securities	-1.2	4.1	N.A.	-.1	N.A.	N.A.	2.8	1.0
Loans	15.9	27.8	N.A.	12.0	N.A.	N.A.	2.2	25.4
Trade credit	-3.7	-1.8	N.A.	-2.5	N.A.	N.A.	-1.7	-1.4
Bonds	7.2	3.2	N.A.	-1.9	N.A.	N.A.	-2.3	11.7
Shares	2.2	-1.4	N.A.	.6	N.A.	N.A.	-3.6	-2.8
Other	1.0	6.5	N.A.	9.9	N.A.	N.A.	3.5	-17.2
Statistical Adjustment	.5	-3.0	N.A.	.0			100.0	100.1
Total	100.0	99.8		100.0			100.0	100.1

Weights Used Above (The Product of Revaluation and Depreciation Factors)

{PRIVATE }	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Canada	.20	.39	.55	.69	.74	.78	.84	.88	.91	.89	.89	.89	.89	.93	.97	1.00
Finland	.29	.52	.70	.85	.90	.86	.87	.91	.91	.98	1.01	.94	.97	.97	.99	1.00
Germany	.11	.22	.32	.40	.46	.53	.59	.76	.71	.75	.78	.81	.87	.92	.96	1.00
United Kingdom	.32	.58	.79	.89	.90	.91	.93	.95	.95	.90	.87	.89	.93	.97	.99	1.00
United States	.17	.33	.47	.59	.62	.67	.73	.77	.78	.80	.79	.78	.81	.89	.94	1.00

Source: OECD Financial Statistics

Note: Numbers are percentages

bonds, United Kingdom statistics refer to private enterprise. If public enterprise were to be included, then Retentions, 97.5; capital transfers, 4.2; short-term securities, 2.1; loans, 5.9; trade credit, — 1.1; — 1.7; shares, — 2.6; other, 2.4; statistical adjustment, — 6.5.

is that corporate new issues in these two countries were more than matched by a net redemption of corporate shares (mainly because of takeovers). In other industrial countries, although new issues made a net positive contribution to corporate investment over the period considered, it was extremely small and amounted to no more than 2 to 3 per cent of the total.

Table 8 also indicates that in all countries the main source of corporate finance is 'retain earnings'. To the extent that the companies use external funds to finance their investment needs, in almost all countries, except the UK, bank finance is by far the most important source of outside funds. Although they undermine the savings function of the stock market, from a theoretical standpoint, these results are not surprising: they are broadly in accord with the pecking order theory of corporate finance outlined earlier.

The pricing of shares is critical to how well can the stock market perform its allocative functions. An efficient pricing process will reward the well managed and profitable firms by valuing their shares more highly than those of unsuccessful and unprofitable firms. This mechanism lowers the cost of capital to the former and hence ensures a greater allocation of new investment resource to such firms at the expense of the latter group of firms who correspondingly face a higher cost of capital. Thus relative share prices of firms in an 'efficient' pricing system should reflect their relative expected profitability.

Tobin [1984] has made a useful distinction between two concepts of efficiency of share prices: the 'fundamental valuation' efficiency and

the 'information arbitrage' efficiency. The latter refers to how quickly all available information is disseminated throughout the market and is incorporated in share prices; the former concept refers to the notion of efficiency outlined in the previous paragraph. There is a large body of evidence from advanced country stock markets which indicates that share prices on these markets are generally efficient in the 'information arbitrage' sense: all new information is immediately reflected in share prices.¹⁵ There is however far less evidence which suggests that actual prices which prevail on the London or New York stock exchanges are 'efficient' from a point of view of fundamental valuation, i.e. that relative share prices of corporations always reflect their true long term expected earnings. Many empirical studies have called attention to myopia, fads, and the domination of stock market prices by short term considerations.¹⁶ It is the influence of short termism and speculators on the stock market that had led Keynes in the *General Theory* to liken the stock market to a gambling casino.

Although "efficient" prices in the fundamental valuation sense are a necessary condition for the stock market to perform its developmental tasks, they are not sufficient. Sufficiency requires in addition, the existence of an 'efficient' takeover mechanism which can ensure that all those companies whose profitability under their existing managements was lower than what it could be under any other management, were

¹⁵ See for example Keane, 1983.

¹⁶ See for example Shiller [1981]; Modigliani and Cohen [1979]; Poterba and Summers [1988]; Smith, Suchaneck and Arlington [1988]; Nickell and Wadhwani [1987]. For a careful recent review of the burgeoning theoretical and empirical literature in this area see Camerer [1989].

acquired by the latter. For large management controlled oligopolistic corporations in capitalist economies, for which the natural selection process on the product markets may not work, the takeover mechanism is the only effective market-based disciplinary device¹⁷. However, modern theorists of the firm and industrial organisation have argued in recent contributions that for a number of powerful reasons (e.g. the transactions costs, the 'free rider' problem), even in principle, the takeover device may not work effectively even when the share prices are "efficient"¹⁸.

More significantly, empirical studies of the actual nature of the take-over selection process on the stock market show that contrary to the folklore of capitalism, in general it is not the case that only the unprofitable companies are taken over, or that greater the profitability (or the stock market valuation) of a company, the correspondingly lower its chances of acquisition. Evidence from a wide range of studies for the UK, the US and other industrial countries indicate that the take-over selection takes place only to a very limited degree on the basis of profitability; it does so much more in terms of the size of the company. A large, relatively unprofitable company has a much greater chance of being immune from take over than a much more profitable but a small company.

In fact, in the real world stock markets, making an acquisition to increase size might itself become a tactic to avoid take over. (Greer, 1986; Singh, 1971).

¹⁷ See further Singh, 1971, 1975; Meade, 1968; Alchian and Kessel, 1962; Manne, 1965. Because of the so-called principal/agent problems in the large management controlled corporations, shareholders dispersed throughout society may not be able to get the managers to act in the shareholders' interests rather than in the managers' own self interest.

¹⁸ See for example Grossman and Hart [1980]; Stiglitz [1985].

If we turn from the question of what kinds of companies are taken over on the stock market and by whom to that of what happens to resource use following takeover, the empirical evidence is no more reassuring. In addition to their disciplinary role, takeovers also provide an important mechanism in a capitalist economy for the reorganisation of the capital resources of the society in response to changing technology, tastes, and market conditions. However a wide range of empirical studies comparing pre - and post merger profitability indicate that, on average, the profitability of merging firms does not improve after merger. To the extent that monopoly power of the acquiring company in the product market may increase as a consequence of takeover, this evidence is compatible with reduced efficiency in resource utilisation following mergers.¹⁹

If the post-merger outcome of the amalgamation process is considered in terms of the effect on share prices (rather than profits), the results of empirical studies suggest that the shareholders of the victims invariably gain as a consequence of takeover (due to the bid premia) whilst those of the acquirers do not. These bid premia on taken over companies are regarded by economists who believe in the 'efficiency' of the stock market pricing and takeover processes, as indicators of unrealised long-term efficiency gains. It is however, more natural to think of them as arising from the 'dual valuation' situation which exists on the stock market in relation to takeovers (Charkham, 1988; Plender,

¹⁹ See Singh [1971, 75]; Meeks [1977]; Mueller [1980].

1990): one is the normal day-to-day valuation of a small number of a company's shares which may be traded and reflects valuation at the margin; the other is the valuation for the control of the company as a whole when intra-marginal holders have to be bought out (Hughes, 1989).

The differences between these two valuations provide enormous opportunities for predators, speculators and others who may gain simply putting a 'company into play' regardless of the economic and industrial logic of the acquisition.

To sum up the above analysis suggests that even with well organised and complex stock markets such as those which exist in the US and the UK, the stock market is unable to perform its disciplinary and allocative tasks at all well; nor is it conspicuously successful in promoting savings. However the fact that the stock markets may not confer much benefit on the advanced countries does not mean that their influence is nevertheless generally benign or at least harmless. As noted in Section I, there are unfortunately strong reasons to believe that the active role which the stock markets play in the US and the UK may actually be damaging to these economies. This theme will be explored in the next section by comparing the characteristics and experience of the Anglo-saxon economies with those of Japan and West Germany where the stock market for historical reasons has traditionally had very little influence on industrial development.

VI. The Stock Market and International Competitiveness: The Financial Systems in the US and the UK Versus West Germany and Japan

An active market for corporate control with its corollary of hostile takeovers is today a central feature of the finance-industry relationships in the stock market dominated economies of the US and the UK. However the relationships between finance and industry are rather differently organised in Japan and West Germany. In these countries there is a far greater role for the banks who tend to have a long term relationship with industrial corporations. There is also a rather different status for the shareholders and the stock market in general than in the Anglo-Saxon economies. Both in Japan and West Germany hostile takeovers are virtually absent.

As Mr. Kazuo Nukazawa, a managing director of Keidanren (the Japanese employers federation) explains:

‘Ours is not the rugged or brutal capitalism of the eighteenth and nineteenth century. When good management today involves not just production and sales but also integration with the corporate and social environment, a takeover objected to by such "stake-holders" is doomed to fail in the long run.’²⁰

In the Japanese scheme of things, the shareholders are placed a ‘distant last’ as the Economist puts it, behind almost everyone else who has dealings with the company — the so-called stake-holders.²¹ The latter include managers, employees, creditors, banks, customers and suppliers and, if the company is a part of a large group, the parent

²⁰ Quoted in the *Economist*, 29 April, 1989.

²¹ Quoted in the *Economist*, 29 April, 1989.

company. Takeovers cannot be successfully completed without the consent of the significant stake-holders in each case.

In West Germany also the incidence of hostile takeovers is very low. Moreover, the size of the German stock market is relatively small; the ratio of market capitalisation to GDP is about 25 per cent in Germany as compared to 80 per cent in Japan, 85 per cent in the UK, and 87 per cent in the US. Of around 400 companies quoted on the German stock markets only about 30 have shares which are actively traded (the other companies being closely held and therefore much less subject to a takeover threat).

Recent academic research on both sides of the Atlantic links the competitive failure of the Anglo-saxon economies (relative to those of Japan and West Germany, for example) to the differences in the operation of the market for corporate control and other features of the financial systems of these countries.²² Very briefly, it is argued that for a number of reasons these stock-markets dominated financial systems of the Anglo-Saxon countries lead to short-termism, i.e. to shorter time horizons for corporate investment decisions. Moreover, it is suggested that the expected rates of return on investments - dictated by the quarterly or six-monthly earnings-per-share requirements of the Anglo-saxon stock markets - are too high. As Cosh, Hughes and Singh [1990] note, if the expected rate of return in, say, country A is significantly greater than in, say, a competitive country B, then, other things being equal, less

²² See for example Cosh, Hughes and Singh [1990]; Frank and Mayer [1990]; Berger et.al [1989].

investment will be carried out in A, since a number of projects which will pass the rate of return test in B will not do so in country A. Since new products and technological developments are often closely connected with investment, country A will over time become increasingly less competitive in relation to country B. This point is echoed in the recent MIT Commission Report on U.S. industrial productivity (MIT, 1989), which suggests that U.S. industries have lost out to the Japanese not because Japanese wages are relatively low, but because the relative cost of capital and the expected rate of return in Japan are much lower. The Commission gives examples of a number of American markets where Japanese have come in, accepted a very low rate of return, while the American companies have diversified and left those markets, since they could not accept such low returns.

The Japanese and also the West German financial systems, which are bank rather than stock-market-dominated, are thus on this analysis regarded as being much more conducive to the development of the real economy and to international competitiveness. This modern thesis connects with an influential earlier analysis by economic historians, such as Gerschenkron [1962], Cameron [1967] and others, who called attention to the critical role of the banks in initiating and fostering industrial development during the last century in Germany, France and Japan.

Keynes observed in the General Theory: 'the spectacle of modern investment markets has sometimes moved me towards the conclusion that to make the purchase of an investment permanent and indissoluble, like marriage, except by reason of death or other great cause, might be a useful

remedy for our contemporary evils. For this would forced the investor to direct his mind to the long term prospects and to those only' (chapter 12). Characteristically Keynes puts his finger on a central analytical weakness of a stock market system with respect to the finance-industry relationship. An important feature of a stock market is that it provides the individual investor with more or less ready liquidity. This is usually regarded as a virtue by the exponents of the stock market. As Mr John Tagino, the then head of global equity trading at Merrill Lynch put it in relation to the global equities market for leading corporations: '(it) gives the customer the ability to have instant liquidity at any time of the day or night, he or she wants it'.²³ However this 'liquidity' also means that the investor need have no commitment to the long term future of the firm. The bank-dominated financial systems are by contrast far better able to ensure such long term financial commitment to their client corporations. Moreover, unlike the small individual investor in a stock market system who has no incentive to gather the costly information to supervise and discipline managers in management controlled large corporations, the banks have both the incentive and capacity to subject corporate managers to much more stringent supervision. The German-Japanese types of banks are thus able to cope far better with the problems of asymmetric information, agency costs, transaction costs than the Anglo-Saxon stock market system.

Finally, during the 1980s, the financial markets are being liberalised in most advanced countries, including the non-Anglo-Saxon

²³ Quoted in Cosh, Hughes and Singh [1989].

ones. However, the impetus for such liberalisation in countries like Japan and West Germany comes from the current imbalances in the world economy and from the US political pressure than from the exigencies of economic development. For reasons given above investment and economic growth in the hitherto non-stock market economies are more likely to be harmed rather than helped by the globalisation and liberalisation of financial markets which is presently taking place.²⁴

VII. Third World Stock Markets, Volatility, New Issues and Foreign Portfolio Investment

Apart from all the problems associated with the finance - industry relationships which well organised stock markets have, most third world stock markets are in their infancy. They tend therefore to be shallow; they do not yet have fully developed systems of regulation, accounting standards, etc. Although in all these respects, these markets may be expected to improve over time and behave more like advanced country stock markets, research suggests that they currently display certain special characteristics. These will be briefly taken up in this section.

VII.1 Volatility

Stock market prices tend to fluctuate more than other economic variables even in fully developed markets. However, the high degree of volatility is a negative feature of stock markets in that it can undermine the financial system as a whole; it also makes share prices much less useful as a guide to the allocation of resources. Moreover to the extent that they

²⁴ See further Cosh, Hughes and Singh [1989; Mayer [1988] and Frank and Mayer [1990].

discourage risk-averse savers and investors, stock market fluctuations may raise the cost of capital to corporations. After the 1987 stock market crash, several enquiries were undertaken in the United States (e.g. the Brady Commission) to see whether as a result of financial liberalisation and global trading, or the introduction of new technology and devices such as programme trading, stock market volatility on the U.S. market has increased, and how in any case it can be reduced. Evidence however indicates that volatility on the US market in the 1980s has been much in line with the long term historical record; it has in fact been less in the last decade than in the 1930s. (Schwert, 1989). Nevertheless it remains a cause for concern and several proposals have been put forward to reduce share price fluctuations, e.g. suspension of share trading if the stock market index falls by more than a specific percentage in a trading period.

However the capital markets of developing countries exhibit much greater volatility than those of advanced economies. As table 9 indicates, during the period 1984 to 89, the standard deviations of monthly percentage changes in share price on the emerging markets tended to be considerably higher than those on the US, the UK or the Japanese stock markets. To illustrate, the figures for the IFC combined index for Latin America in table 9 suggest that on average over this period share prices on the Latin American markets arose by about 2.5 per cent per month in US dollars terms, but on the assumption that percentage monthly price changes are normally distributed, in two third of the months they could have fallen by fourteen per cent or risen by fourteen per cent. In another thirty per cent of the months they could have fallen or risen by twenty eight per cent.

Turning to individual country stock markets, between 1982 and 1985, share prices on the Brazilian stock market rose five fold (in US dollars terms); two year later they dwindled to twenty eight per cent of their 1985 value. In the first nine months of 1987, share price on the Mexican stock market rose six-fold. However, following Black Monday in October 1987 prices fell to a tenth of their pre crash level. (Cosh, Hughes and

Table 9

Standard Deviations of Developing and Developed Country Price Indexes
(five years ending December 1989)

{PRIVATE }Market	Number of months	Standard deviation	Mean of % changes
<u>Latin America</u>			
Argentina	60	37.05	7.14
Brazil	60	21.07	2.51
Chile	60	8.26	3.41
Colombia	60	6.10	1.59
Mexico	60	16.09	4.47
Venezuela	60	11.59	0.29
<u>East Asia</u>			
Korea	60	8.16	2.93
Phillipines	60	11.15	5.62
Taiwan, China	60	15.15	5.46
<u>South Asia</u>			
India	60	8.76	1.56
Malaysia	60	8.23	1.05
Pakistan	60	2.92	0.33
Thailand	60	7.90	2.69
<u>Europe/ Mideast/Africa</u>			
Greece	60	12.39	2.45
Jordan	60	5.41	0.00
Nigeria	60	11.24	-1.00
Portugal	47	18.17	5.53
Turkey	36	23.67	4.90
Zimbabwe	60	8.71	3.39
<u>IFC Regional Indexes</u>			
Composite	60	7.06	2.14
Latin America	60	13.91	2.14
Asia	60	7.98	2.82
<u>Developed Markets</u>			
USA (S&P 500)	60	5.16	1.39
UK (FT-100)	60	5.88	1.31
Japan (Nikkei)	60	4.08	2.17
EAFE	60	5.25	2.61

Since January 1986,
Since December 1986
Source: IFC [1990]

Singh, 1989). In Taiwan, the largest third world stock market, between 1987 and February 1990, the share price index rose by three hundred and thirty per cent to reach a peak of 12,600; the index then fell to a quarter of its value (3160) by September 1990.²⁵ In 1989, the average value of shares traded for each three-hour trading day on the Taipei stock market was nearly three billion dollars. That was one billion dollars a day more than in London, and more than half New York's trading. On August 28, 1989, Taipei recorded a trading volume of 7.6 billion dollars. The world's biggest stock market, Tokyo traded just 4.2 billions dollars worth of shares on the same day.²⁶

A priori, the reasons for the greater price fluctuations on the third world stock markets should not be far to seek. They could be ascribed to various imperfections and segmentation of the capital market, lack of adequate public information on corporate performance and other similar factors. As the Economist noted in its leader of 9 September 1989 with respect to Taipei: 'Taiwan's stock market is a rigged casino with a phenomenal turnover. Its bank are constipated by a diet of state control. Its family-control firms equate a accountancy with taxevading creativity. Its courts react not just to the lawbooks, but to the nudges of the influential. Critics say it is as free wheeling and corrupt as the Philippines, but then admit it is a free wheel that works.' (page 20).

There is however on the face of it an important puzzle with respect

²⁵ Financial Times, 20 Sept., 1990

²⁶ Economist, 9 Sept., 1989.

to this explanation of greater imperfections on the third world stock markets because of their underdevelopment. This puzzle arises from the academic work on the 'efficient markets' hypotheses for the emerging markets. A number of such investigations which have been carried out on these markets do not always reject the weak form of the hypothesis i.e. that share prices quickly incorporate all available information. In a study of London, and Bombay stock markets Sharma and Kennedy [1975], found the Bombay market on this criterion to be no less efficient than the one in London²⁷. If the third world markets were as imperfect as they appear to be, one would not expect the efficient market hypothesis to hold even in a weak form. The answer to this apparent conundrum lies in the fact that the non-rejection of 'efficient market hypothesis' is not even a guarantee of 'information-arbitrage' efficiency of share prices let alone that of 'fundamental valuation' efficiency. As Summers [1989] notes the non-rejection of the 'efficient markets hypothesis' does not imply that therefore the converse must be true: the data may not reject a hypothesis of 'inefficient' markets in the 'information-arbitrage' sense either.

VII.2 New Issues and Equity Financing

It was seen earlier that equity financing makes a very small contribution to the growth of corporations in the advanced countries - because of takeovers, in the US, and the UK, the equity market's net contribution to financing of corporate growth has in fact been negative in recent years. However up to now very little information has been available on the patterns of corporate finance in developing countries. In

²⁷ See also Sharma [1983].

the first study of its kind, Singh and Hamid (1991) have analysed corporate financial structures in nine developing countries over the period 1980-1988. The countries studied included: South Korea, Thailand, Malaysia, Pakistan, India, Turkey, Mexico, Jordan and Zimbabwe. Singh and Hamid's sample frame is the 50 largest manufacturing firms quoted on the stock markets in each of these countries.

This research reveals some very important differences in the financing of corporate growth in the developed and the developing countries. As Table 10 shows, unlike the advanced country corporations, firms in the developing countries use external finance to a far larger extent. For example, the median Korean corporation among the top 50 financed nearly 90 per cent of its growth from external sources in the 1980s; the corresponding figure for the median Mexican, Thai and Turkish

Table 10
All Countries: Top 50 Listed Companies in Manufacturing [1]
Financing of Corporate Growth: Before and After Tax Retention Ratios [2]
Internation and External Finance of Growth [2] and Changes in Internal Finance [3]
: Median Values

{PRIVA TE }Period	Country	Retentio n Ratio (B.T) L.T. (%)	Retentio n Ratio (A.T) L.T. (%)	Internal Finance L.T. (%)	External Finance Equity (%)	AVG Extnl Finance LTD (%)	Internal Finance CH (%)
80-87	Korea	33.7	59.3	12.8	40.3	45.4	7.6
80-86	Pakistan	30.2	46.2	58.3	12.3	16.1	-4.6
80-87	Jordan	24.2	32.0	28.1	52.1	0.0	41.5
83-87	Thailand	N.A.	46.7	17.3	N.A.	N.A.	23.1
84-88	Mexico	N.A.	N.A.	17.1	76.0	2.9	14.9
80-88	India	47.7	67.7	36.1	11.0	45.6	-12.6
82-87	Turkey	16.0	24.4	18.1	60.5	15.5	13.2
83-87	Malaysia	23.5	45.0	42.4	31.4	2.1	-7.7
80-88	Zimbab	38.8	61.6	58.5	43.0	0.0	16.8

N.A. - Not available

[1] Number of companies in Jordan is 35 and in Turkey is 38

[2] Average value for the relevant period for each country

[3] Percentage point changes from the average of the first two years to the average of the last two years of the period

[4] Instead of "Net Assets", "Total Assets" are used.

* Upper limit

Source: Singh and Hamid [1991]

corporations was, in each case, more than 80 per cent. These are extremely high percentages relative to the experience of developed countries (see Table 8). Secondly, and equally significantly, in more than half the countries in the Singh and Hamid sample, the top corporations used much more equity, rather than debt, to finance the growth of their net assets in the last decade. The largest quoted Jordanian firms financed more than 50 percent of their growth from equity issues and the biggest Turkish firms over 60 percent. Although the median South Korean company used relatively more debt than equity, more than 40 percent of its growth was financed by equity.

If one considers patterns of corporate finance in an historical perspective, it is interesting to observe that in the United States also at an earlier stage of its development, the equity market was a much more important source of corporate finance than subsequently. (See Table 11).

It might therefore be thought that developing countries today are simply repeating the history of advanced countries and that in the initial phases of development, equity finance is very important for firm growth.

This would however be a hasty conclusion. This is because research suggests that the greater degree of equity financing in the United States at the turn of the century does not indicate so much the significance of new

Table 11

Proportions of Total Financing Accounted for by Particular
Sources of Funds: US 1901-1979: Flow of Funds Data

{PRIVATE }	Total Debt	Long term	Short Term	Internal	New Stock
Period	Total Sources (1)	Total Sources (2)	Liabilities Total Sources (3)	Funds Total Sources (4)	Total Sources (5)
1901-12	.31	.23	.08	.55	.14
1913-22	.29	.12	.17	.60	.11
1923-29	.26	.22	.04	.55	.19
1930-39	Negative	Negative	Negative	1.14	.19
1940-45	.15	Negative	.20	.80	.03
1946-59	.30	.16	.14	.64	.05
1960-69	.36	.18	.18	.62	.02
19970-79	.45	.21	.24	.52	.03

Source: Taggart [1985]

share issues for financing corporate growth, but is rather a reflection of the gigantic merger movement which swept American industry during that period.²⁸ The stock market was used by J.P. Morgan and others to float shares to carry out the huge amalgamations of that era. Moreover in Italy, France, Germany, and Japan, even at an earliest stage in the development of these economies, the stock market played little role in the financing of firm growth; the banks were much more important in this respect. In the UK the small provincial stock markets rather than London were indeed significant suppliers of finance to industrial firms. Lazonick (1986) has however argued that the nature of this financing hindered rather than helped UK's international competitiveness and economic growth.

In the developing countries today, with many of them enjoying a stock market boom in the 1980s, new issues seem to be a genuine source of finance for corporate expansion. However, the important question is whether the development of the stock markets in these economies has led to an increase in aggregate savings or that it simply represents the substitution of one form of saving (say bank saving or government bonds) for another (purchase of corporate shares in the stock market). There is little evidence of an increase in aggregate savings for most developing countries as a result of greater new issue activity on the stock market. In some of the countries (e.g. Mexico, Turkey,) the aggregate savings actually fell during the 1980s. Even if aggregate savings do not rise in a country, for reasons outlined in the forgoing sections, it could be argued that the stock market is still useful in so far as it leads to a more efficient

²⁸ See Foley and Lazonick [1986] and the literature cited therein.

allocation of these savings or to better corporate performance as a result of stock market exposure. There is no evidence in the developing countries on the latter issue although as seen earlier the results of the research from advanced countries on the operations of the market for corporate control are far from reassuring. With respect to more efficient allocation of savings, the high volatility of share prices on the developing countries stock markets and the apparent domination of many of these markets by speculators, does not augur well for this hypothesis either.

It has sometime been suggested that since the developing countries have regulated financial systems, speculation in the stock markets acts as release valve that in a free system will be expressed elsewhere. However for all its faults, it is better to allow speculation in gold or real estate than in corporate shares which concern an economy's directly productive potential. Moreover to the extent that it is thought necessary for the government to cater to the tastes of speculators, it is better to provide them with a lottery than a stock market where the underlying assets are nothing less than the country's industrial present and future.

VII.3 Foreign Portfolio Investment

As noted in section 1, the WIDER Study Group has strongly argued the case for the encouragement of third world stock markets and their opening up to foreign investors in order to attract portfolio investment. The group assume that because of the debt crisis, further capital flows from banks to developing countries on a voluntary basis are unlikely for many years. They however, foresee a great potential in foreign equity

investment. The main reasons for their optimism on this score are the very large and rapidly increasing assets of the pension funds ,insurance companies and other institutional investors in the advanced countries and their need for portfolio diversification.

In 1989, the total assets of these institutions were estimated to be of the order of \$7.5 trillion; significantly, the rate of growth of these assets is about 15 % per annum. Approximately 10 % of the total institutional assets were held in foreign equities in 1989; the proportion accounted for by investments in the Emerging Markets was however extremely small, being merely about one fifth of one percent. Consequently, the total value of the assets of non-residents in emerging markets in 1989 was only of the order of \$ 15 billion. On the assumption that most of this investment took place over the previous five years, the WIDER Study Group suggest that this implies a net flow of investment to emerging markets of about \$ 1 billion per annum on a balance of payments valuation basis (excluding valuation changes).

The latter figure is quite small compared even with the net outflow of resources which is currently taking place from the Latin American countries alone as a result of the debt crisis. It is of course paltry in relation to the foreign resources which developing countries as a whole require if they are to restore their pre-1980 long term growth rates. Nevertheless, for economies which are severely foreign exchange constrained, almost any positive non-debt-creating inflow of foreign capital may be regarded as being useful. More importantly, however, the Study GROUP believe that on fairly conservative assumptions (e.g. an

increase in the proportion of industrial countries institutional funds held in the Emerging Markets - let us call it the coefficient "k" - rising from 0.2 percent in 1989 to 0.5 percent by the year 2000), the total value of investments of non-residents in the Emerging Markets will be of the order of \$ 100 billion by the end of the century. This would imply a net inflow of foreign portfolio investment of \$ 10 billion per annum on a balance of payments basis. Of course if the value of "k" were to increase to one percent, the foreign exchange benefits of these investments to the developing countries will be correspondingly larger. The latter value for k will still imply that the Emerging Markets' share is no more than 5 to 6 % of total foreign equity holdings of institutional investors, compared with the ratio of total capitalisation of the Emerging to the Developed Markets of 11 % in 1989. The Study Group recommend that even if the more conservative estimates of the institutional investments in the Emerging Markets were to be realised, the developing countries should consider abolishing capital controls so as to encourage foreign portfolio inflows. They further propose that the IMF's articles of agreement which permit such controls by poor countries be reconsidered.

The Study Group are right in their belief of the considerable scope for foreign portfolio investments in developing countries. As Table 12 indicates there is generally low correlation between share prices in the third world and advanced country stock markets; for some of the emerging markets the correlations have been negative during the period 1984

Table 12

Correlation Coefficient Matrix of IFC Price Indexes for Emerging Markets and the Price Indexes for Advanced Countries
(five years ending December 1989)

{PRIV	1.00																							
UK	0.76	1.00																						
JPN	0.13	0.00	1.00																					
EAFE	0.41	0.42	-0.03	1.00																				
ARG	-0.09	-0.06	-0.24	-0.15	1.00																			
BRA	0.03	0.02	0.05	0.09	-0.07	1.00																		
CHI	0.27	0.26	-0.21	0.15	-0.12	0.04	1.00																	
COL	0.11	0.13	-0.03	-0.01	-0.18	-0.09	0.34	1.00																
GRE	0.22	0.08	0.04	0.15	0.10	-0.18	0.18	0.29	1.00															
IND	-0.03	-0.06	-0.04	-0.04	0.19	-0.04	-0.03	-0.11	-0.05	1.00														
JOR	-0.03	0.01	0.8	-0.08	0.19	0.00	-0.07	-0.14	-0.07	-0.28	1.00													
KOR	0.28	0.18	0.17	0.16	-0.16	0.18	0.10	0.06	0.05	-0.03	-0.29	1.00												
MAL	0.52	0.59	0.14	0.21	-0.07	0.06	0.24	-0.13	0.09	-0.03	-0.05	-0.04	1.00											
MEX	0.34	0.36	0.14	0.08	0.12	-0.10	0.35	0.10	0.20	0.02	-0.13	0.12	0.38	1.00										
NIG	0.10	-0.01	-0.08	0.07	0.11	0.07	0.02	0.08	-0.09	0.02	-0.09	0.06	-0.24	-0.12	1.00									
PAK	-0.15	0.06	-0.16	0.10	0.01	-0.07	0.05	0.11	0.05	0.21	0.10	0.08	-0.19	0.09	-0.01	1.00								
PHI	0.19	0.16	0.04	0.21	-0.19	0.06	0.19	-0.04	0.05	-0.13	0.03	0.16	0.22	0.03	0.12	-0.08	1.00							
POR	0.15	0.26	0.11	0.36	-0.02	0.05	0.21	0.33	0.55	-0.14	-0.01	-0.04	0.18	0.38	-0.19	0.16	-0.13	1.00						
TAI	0.09	0.18	0.05	0.06	0.01	0.02	0.34	0.19	0.17	-0.05	-0.10	-0.20	0.15	0.41	-0.23	0.00	-0.17	0.44	1.00					
THA	0.30	0.46	0.03	0.13	-0.03	-0.05	0.29	0.14	0.26	-0.04	0.04	-0.21	0.48	0.43	-0.15	0.13	0.01	0.33	0.50	1.00				
TUR	0.19	0.13	0.25	0.03	0.32	0.02	0.25	0.12	0.26	0.03	-0.25	0.01	0.32	0.33	0.14	0.02	0.16	-0.33	0.14	0.22	1.00			
VEN	-0.05	0.08	0.10	0.01	0.04	-0.14	-0.17	-0.03	-0.07	-0.04	0.22	-0.07	0.11	0.00	-0.01	0.15	-0.04	0.08	-0.10	0.00	0.07	1.00		
ZIM	-0.13	-0.15	-0.15	0.04	-0.30	-0.04	0.03	-0.05	0.01	0.13	0.18	-0.28	-0.02	-0.14	-0.03	0.21	0.05	0.16	-0.08	-0.04	-0.09	0.07	1.00	
	USA	UK	Jpn	EAFE	Arg	Bra	Chi	Col	Gre	Ind	Jor	Kor	Mal	Mex	Nig	Pak	Phi	Por	Tai	Tha	Tur	Ven	Zim	

S&P 500

FT-100

Nikkei

Since January 1986

Since December 1986

Source: IFC [1990]

1989.²⁹ This makes investment in third world markets attractive for pension funds and other institutional investors in advanced economies for portfolio diversification and risk spreading. Nevertheless, as suggested in the analysis of the earlier sections there is a serious negative side to the Study Groups proposals to which they seem not to have given sufficient attention. To briefly recapture the main points, first the abolition of capital controls will make the national economy much more vulnerable both to international macro-economic fluctuations as well as to capital flight. Further, in view of the destabilising feedbacks between the financial and the currency markets, it will make the task of exchange rate management, and hence of inflation, much more difficult. Secondly, for reasons explained in Section VI stock market development may damage industry - financial relationships and harm investment, competitiveness and the real economy. Thirdly, if the Study Group's proposals are adopted, most of this portfolio investment is likely to go to a small number of the most developed third world economies with large corporations and relatively well organised stock markets rather than to a majority of the poor countries.

The Study Group argue that fostering stock market development will among other things discourage capital flight and in fact bring flight capital back since the market gives wealth holders an attractive alternative vehicle for domestic investment. This argument is plausible but deceptive. This is because capital flight is essentially a consequence of financial and macro economic instability; of course in turn it also

²⁹ See also Cosh, Hughes and Singh [1989]; IMF [1989].

exacerbates such instability. The existence of a stock market per se is unlikely to help in this respect. In unstable economic conditions, stock market volatility on the contrary could enhance financial instability and in fact lead to capital flight not least by foreign portfolio investors.

VIII. Conclusion

No attempt will be made here to systematically summarise the arguments and the analysis of the previous sections. Essentially this paper suggests that it is arguable that even in advanced countries with well functioning markets, the stock markets more likely do more harm than good to the real economy. The supposed positive contributions of the stock markets (encouragement of savings, more efficient allocation of investment resources, the discipline of corporate managements through competitive selection in the market for corporate control), for all the reasons discussed earlier, do not materialise in practice. The market for corporate control encourages large companies to expand through takeovers rather than to seek organic growth which promotes economic development. Moreover, it is not at all clear that the takeover selection process leads to the survival of firms which are efficient at creating real wealth rather than being simply skilled in financial engineering.

There is evidence as well as strong analytical grounds for believing that these and related negative features of the stock markets (speculation, lack of long term investor commitment to corporations, short termism) may play a significant role in putting the stock market dominated economies of the United States and the United Kingdom at a competitive disadvantage in relation to countries such as West Germany and Japan.

These unfavourable aspects of the stock market are likely to be particularly important in third world countries with undeveloped stock markets and high volatility of share prices.

To the extent that developing countries today have a choice they should attempt to foster bank-based financial systems more along the lines of the 'follower' countries (Japan, West Germany, France) rather than to establish and encourage stock markets. Historically, these bank-based systems have a proven record of successfully promoting industrial development in these countries. Moreover, as we have seen earlier, the modern theory of information provides strong theoretical reasons for banks to be on the whole more suitable vehicles for achieving these ends than the stock market. The ordinary shareholder of a large corporation has neither the ability nor the incentive to obtain the necessary information (which is costly) to monitor management activities, thus leading him or her to eschew "commitment" to the organization and to prefer liquidity. The banks, on the other hand, have both the means and the incentive to collect such information and to take a long term view of firms' prospects - a perspective which is vital for industrialization in developing economies.

Notwithstanding these extremely important advantages of bank-based financial systems, it would be a mistake not to learn from the experience of the last two decades when, in many developing countries, such systems have performed far from adequately. In a number of developing countries experiencing a high degree of macro-economic instability, bank-based finance has tended to degenerate into

inflationary/inefficient finance. Experience suggests the following to be the most serious shortcomings of such systems in the developing country context:

- (a) "crony capitalism", which finances schemes of particular individuals and families with political connections, rather than promote long term industrial development;
- (b) industry-finance links of the bank-based type can in principle, and sometimes in practice, lead to monopolistic positions in product markets and thwart entry by new firms, thereby hindering efficient industrial development;
- (c) imprudent or inadequate government regulation of the banks has sometimes jeopardized the integrity of the financial system as a whole (for example Chile, following financial liberalization in the early 1980s).

Thus although bank-based systems are much to be preferred in principle to the stockmarket-based systems, the developing countries should pay particular attention to questions of proper regulation and to the prevention of monopolistic abuse by the banks.

However, to be realistic, it must be recognised that the stockmarkets in developing countries are today a part of the new economic landscape and notwithstanding their dubious merits in relation to economic development, they are there to stay. The question, therefore, arises how, if at all, can their negative features be contained? The

analysis of previous sections suggests that from the perspective of economic development, an important general policy principle for the ldcs should be to attempt to insulate as far as possible the real industrial economy from the influence of the stock market. In this context, the following kinds of policy proposals require careful consideration by developing country governments. First, they should examine schemes of taxation to reduce share turnover as was mooted by Keynes and has more recently been proposed by Tobin in relation to transactions on the international currency markets.

Secondly, the developing countries should be seriously concerned about the effects of a prospective market for corporate control. Since stockmarkets in these countries are still in their infancy, most of them do not yet have an active market for corporate control (although some takeover bids on the Indian stockmarkets have been reported in the most recent period). However, as the stockmarkets become more mature and more firmly established, left to itself, the development of a corporate control market is an inevitable evolution. As seen earlier, such a market greatly accentuates the negative features of a stockmarket for economic development (e.g. by encouraging short-termism). The developing countries should, therefore, if at all possible, adopt the German-Japanese type institutional arrangements to pre-empt the development of a market for corporate control of the kind which exists in the Anglo-Saxon countries. However, if that is not feasible, these countries would be wise to take steps to restrict the operations of the market for corporate control. This may involve for example major changes in company law, reducing the role of shareholders and enhancing that of the stake-holders or the

government in takeover situations. Some of these proposals in relation to the market for corporate control in the UK are examined in Cosh, Hughes and Singh (1990).

Thirdly to the extent that institutional investors such as pension funds are public agencies which appears to be the case in many developing countries, the governments could use them to maintain more orderly markets. Fourthly, and importantly, the governments should encourage product market competition to discipline corporations rather than to rely on the stock market for this purpose. If a developing country possesses or is able to establish a German-Japanese type financial system, such discipline would be supplemented by the bank monitoring of corporations.

To reduce the negative aspects of the role of the stock market would require a full exploration of the policy areas outlined above in relation to the specific circumstances of a particular country. Many of these policy issues are currently subjects of considerable debate in the advanced countries. Their application and analysis in relation to developing country stock markets requires a separate paper in its own right.

Bibliography

Akyüz, Y., [1991], Financial Liberalization in Developing Countries: A Neo-Keynesian Approach, Discussion Papers, No. 36, March, United National Conference on Trade and Development (UNCTAD).

Acquisitions Monthly, [1990], "Acquiring in Germany," May.

Alchian, A.A. and Kessel, R.A., [1962], "Competition Monopoly and the Pursuit of Pecuniary Gain, in Aspects of Labour Economics", N.B.E.R., Princeton.

Amsden, A.H., [1989], Asias's Next Giant, New York: Oxford University Press.

Atkin, N. and Dailami, M. [1990], "Stock Markets in Developing Countries: Key Issues and a Research Agenda," World Bank Working Paper WPS 515, October.

Auerbach, A.J. [1979], "Wealth Maximization and the Cost of Capital," Quarterly Journal of Economics, Vol. 93.

Auerbach, A.J., and King, M.A. [1983], "Taxation, Portfolio Choice and Debt-Equity Ratios: A General Equilibrium Model," Quarterly Journal of Economics, 98, pp. 587-609.

Avramovic, D., [1988], "Conditionality: Facts, Theory and Policy-Contribution to the Reconstruction of the Internation Financial System," World Institute of Development Economic Research, Helsinki.

Berger, S., Dertuzos, M.L., Leicester, R.K., Solow, R.M. and Thurow, L.C., "A New Industrial America" Scientific American, Vol. 260, No. 6, pp. 390-46.

Cable, J. [1985], "Capital Markets Information and Industrial Performance: The Role of West German Banks," Economic Journal, March.

Camerer, Colin [1989], "Bubbles and Fads in Asset Prices", Journal of Economic Surveys, Vol. 3, No.1, pp. 32-40.

Cameron, R.E. [1967], Banking in the Early Stages of Industrialization: A Study in Comparative Economic History, New York, Oxford University Press.

Charkham, J., [1989], "Corporate Governments and the Market for Control of Companies," Bank of England, pannel paper No. 25, March.

- Cho, Yoon Je [1986], "Inefficiencies from financial liberalisation in the absence of well-functioning equity markets", Journal of Money, Credit and Banking, vol. 18, no. 2, May.
- Cho, Yoon Je. and Khatkhate, D., [1989] Financial Liberalisation: Issues and Evidence, Economic and Political Weekly, May 20.
- Cosh, A.D., Hughes, A., and Singh, A. [1989], "Openness, Innovation and Share Ownership: The Changing Structure of Financial Markets", World Institute of Development Economics Research of the UN University, Helsinki, Working Papers No. 74, October.
- Cosh, A., Hughes, A., Singh, A. [1990], "Takeovers and Short-Termism in the U.K.: Analytical and Policy Issues in the U.K. Economy," Institute for Public Policy Research, London.
- Cottrell, P.L., [1980], Industrial Finance 1830-1914, Methuen.
- De Angelo, H., and Masulis, R. [1980], "Optimal Capital Structure Under Corporate and Personal Taxation" Journal of Financial Economics, 8, pp. 3-81.
- Donaldson, G. [1961], Corporate Debt Capacity, Graduate School of Business Research, Harvard University, Boston.
- Dore, R.P. [1985], "Financial Structures and the Long-term View," Policy Studies, 6, pp. 10-29.
- Edwards, J.L. [1988], "Recent Developments in the Theory of Corporate Finance," Oxford Review of Economic Policy, Vol. 3, No. 4, pp. 1-12.
- Elbaum, B. and Lazonick W. (eds.), [1986], The Decline of the British Economy, Clarendon Press.
- Fazzari, S.M., Hubbard, R.G. and Peterson, B.C. [1988], "Financing constraints and corporate investment," Bookings Paper on Economic Activity, I.
- Frank, J. and Mayer, C. [1990], "Capital markets and Corporate Control: A Study of France, Germany and the U.K.," Economic Policy.
- Fry, M.J. [1988], Money, Interest and Banking in Economic Development, London.
- Gerschenkron, A. [1962], Economic Backwardness in Historical Perspective, A Book of Essays, Cambridge, Belknap Press of Harvard University Press.

- Greenwald, B., Stiglitz, J.E., and Weiss, A. [1984], "Information imperfection in the capital market and macroeconomic fluctuations," American Economic Review, Vol. 74.
- Greer, D.F., [1986], "Acquiring in Order to Avoid Acquisition," The Anti-Trust Bulletin, Spring.
- Grossman, S.J. and Hart, O.D. [1982]. "Corporate financial structure and managerial incentives" in J.J. McCall, (ed.), The Economics of Information and Uncertainty, The University of Chicago Press, Chicago.
- Grossman, S.J. and Stiglitz, J.E. [1980], "On the impossibility of informationally efficient markets" American Economic Review, 70, pp. 393-408.
- HMSO., [1989], Barriers to Takeovers in the European Community (3 Vols.), London, HMSO.
- Hughes, A., [1989], "The Impact of Merger: A Survey of Empirical Evidence for the U.K.," in J. Fairburn and J.A. Kay (eds.) Mergers and Merger Policy, Oxford.
- Hughes, A. and Singh, A.[1987], "Takeovers and the Stockmarkets," Contributions to Political Economy, 6, pp. 73-85.
- IFC, [1990], Emerging Stock Markets Factbook, 1990, International Finance Corporation, Washington D.C.
- Jensen, M.C. and Meckling, W.M. [1976], "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure," Journal of Financial Economics, pp. 305- 360.
- Keane, S.M., [1983], Stock Market Efficiency, Philip Allan, Oxford
- Keynes, J.M., [1936], The General Theory of Employment, Interest and Money, Harcourt, Brace and Company, New York.
- Killick, J.R. and Thomas W.A. [1970], "The Provincial Stock Exchanges 1830-1870," Economic History Review, 2nd ser., 23.
- King, M.A. [1977], Public Policy and the Corporation, Chapman and Hall, London.
- MIT [1989], MIT Commission on Industrial Productivity, Made in America: Regaining the Productivity Edge, Cambridge, Mass. ,MIT Press.
- McKinnon, Ronald, I., [1973], Money and Capital in Economic Development.

Washington: Brookings Institution.

Mayer, Colin, [1988], "New Issues in Corporate Finance," European Economic Review, June.

Meade, J.S., [1968], "Is the "New Industrial Estate" Inevitable?," Economic Journal, June.

Meyer, J.R. and Kuh, E. [1957], The Investment Decision: An Empirical Study, Harvard University Press.

Meyer, J.R. and Glauber, R.R. [1964], Investment Decisions: Economic Forecasting and Public Policy, Graduate School of Business Administration, Harvard University.

Miller, M.H. [1977], "Debt and Taxes" Journal of Finance, 32, pp. 261-75.

MIT Commission on Industrial Productivity [1989], Made in America: Regaining the Productivity Edge, MIT Press, Cambridge Massachusetts.

Modigliani, F. and Miller, M.H. [1958], "The Cost of Capital, Corporate Finance and the Theory of Investment," American Economic Review, 48, pp. 201-297.

Modigliani, F. and Cohen, R., [1979], "Inflation, Rational Valuation and the Market", Financial Analyst Journal, March/April, pp.24-44.

Mullins, M. and Wadhwani, S.B., [1989], "The Effects of the Stock Market on Investment: A Comparative Study," The European Economic Review, Vol. 33, pp. 939-961.

Myers, S. [1977], "Determinants of Corporate Borrowing," Journal of Financial Economics, 5, pp. 147-75.

Myers, S.C. [1984], "The Capital Structure Puzzle" Journal of Finance, Vol. 39.

Myers, S.C. [1985], "Comment on Investment Patterns and Financial Leverage," in B. Friedman, (ed.), Corporate Capital Structure in the United States, University of Chicago Press, Chicago.

Myers, S.C. and Majluf, N.S. [1984], "Corporate Financing and Investment Decisions When Firms Have Information That Investors Do Not Have," Journal of Financial Economics, Vol. 13.

Nickell, S. and Wadhwani, S., [1987], 'Myopia, the "Dividend Puzzle" and Share Prices', London School of Economics, Centre for Labour Economics, London,

Discussion Paper No. 272.

Odagari, H. and Hase, T., [1989], "Are Mergers and Acquisition Going to be Popular in Japan too? An Empirical Study," International Journal of Industrial Organisation, Vol. 7, No. 1, March, pp. 49-72.

Ordover, Janusz and Weiss, A., "Information and the Law: Evaluating Legal Restrictions on Competitive Contracts," American Economic Review, 71 (May 1981).

Poterba, M. and Summers, L.H. [1985], "The Economic Effects of Dividend Taxation," in E.I. Altman and M.G. Subrahmanyam, (eds.), Recent Advances in Corporate Finance, Homewood, Illinois.

Poterba, M. and Summers, L.H., [1988], "Mean Reversion in Stock Prices: Evidence and Implications," Journal of Financial Economics, Vol. 22, pp. 27-59.

Ross, S.A. [1977], "The Determination of Financial Structures: The Incentive Signalling Approach," Bell Journal of Economics, 7, pp. 23-40.

Sachs, J.D. [1987], "Trade and Exchange Rate Policies in Growth Oriented Adjustment Programmes", in World Bank, Growth Oriented Adjustment Programmes, Washington, DC.

Schwert, G.W., [1989], Why Does Stock Market Volatility Change Over Time? The Journal of Finance, Vol. XLIV, No. 5, December.

Sharma, J.L., [1983], "Efficient Capital Markets and Random Character of Stock Price Behavior in a Developing Economy," Indian Economics Journal.

Shaw, Edward., [1988], Financial Deepening in Economic Development. New York: Oxford University Press.

Shiller, R.J., [1981], "Do Stock Prices Move too much to be Justified by Subsequent Changes in Dividends? American Economic Review, Vol. 71, pp. 421-436.

Singh, A. [1971], Takeovers: their Relevance to the Stock Market and the Theory of the Firm, Cambridge University Press, Cambridge.

Singh, A. [1975], "Takeovers, Economic Natural Selection and the Theory of the Firm: Evidence from the Post-War U.K. Experience," Economic Journal, September.

- Singh, A. [1987], "Manufacturing and De-industrialisation," in The New Palgrave, London, Macmillan.
- Singh, A. [1989], "Third World Competition and De-industrialisation in Advanced Countries," Cambridge Journal of Economics, Vol. 13, March, pp. 103-120.
- Singh, A. [1990], "The Institution of a Stock Market in a Socialist Economy: Notes on Chinese Economic Reform" in P. Nolan and Dong Fueng, (ed.), The Chinese Economy and its Future, Cambridge, Polity Press.
- Singh, A and Hamid J [1991], "Corporate financial structures in developing countries", Economics Department, IFC, Washington, D.C. Forthcoming as an IFC Technical Paper.
- Stiglitz, J.E. and Weiss, A., "Credit Rationing in markets with Imperfect Information." American Economic Review 71, No. 3, (June 1981), 393-410.
- Stiglitz J.E. and Weiss, A., "Incentive Effects of Termination: Applications to the Credit and Labor Markets." American Economic Review 72: 912-27.
- Stiglitz, J.E. [1985], "Credit Markets and the Control of Capital," Journal of Money Credit and Banking, Vol. 17, No. 2.
- Stiglitz, J.E. and Weiss, A., [1986], "Credit Rationing and Collateral," in J. Edwards, J. Franks, C. Mayer and S. Schaefer, eds., Recent Developments in Corporate Finance, Cambridge University Press, pp. 101-135.
- Stiglitz, J.E. and Weiss, A., (Forthcoming), "Banks as Social Accountants and Screening Devices and the General Theory of Credit Rationing," In Essays in Monetary Economics in Honor of Sir John Hicks, Oxford, England: Oxford University Press.
- Subrahmanyam, M.G., On the Optimality of International Capital Market Integration, Journal of Financial Economics 2 (1975), 3-28, U.S.A.
- Sudweeks, Lorin, B., [1990], Equity Market Development in Developing Countries, New York Westport, Connecticut, London.
- Summers, L.H., [1986], "Does the Stock Market Rationality Reflect Fundamental Values?," Journal of Finance, July.
- Taggart, Jr, R.A. [1985], "Secular Patterns in the Financing of U.S. Corporations in B.M. Friedman, (ed.), Corporate Capital Structure in the United States, University of Chicago Press, Chicago.

Titman, S. and Weiss, R. [1988], "The Determinants of Capital Structure Choice," The Journal of Finance, Vol. XLIII.

Tobin, J. [1984], "On the Efficiency of the Financial System," Lloyds Bank Review, July, pp. 1-15.

WIDER, [1990], Foreign Portfolio Investment in Emerging Equity Markets, Study Group Series No. 5, World Institute for Development Economics Research of the United Nations University, Helsinki.

Williamson, O.E. [1988], "Corporate Finance and Corporate Governance," The Journal of Finance.

Zhao, Zi Yang, [1988], Report to the 13th National Congress of the Communist Party of China, Beijing Review Publications, 1988.